



MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: **Nuclistain**

PRODUCT NUMBER: EC-730

CHEMICAL NAMES/ DESCRIPTION: Aqueous solution of quinone-imine dye.

MANUFACTURER: National Diagnostics, Inc
305 Patton Drive
Atlanta, GA 30336TELEPHONE NUMBER:
(800) 526-3867
(404) 699-2121EMERGENCY NUMBER:
CHEMTREC (800) 424-9300

2. COMPOSITION / INFORMATION ON INGREDIENTS

| Component | % Comp | CAS # | EINECS # | TLV (units) |
|-------------------------------|--------|-------|----------|------------------|
| Proprietary Quinone-Imine Dye | < 3 | | | none established |

3. HAZARDS IDENTIFICATION

APPEARANCE AND ODOR: Opaque blue liquid.

EMERGENCY OVERVIEW - IMMEDIATE HAZARD
MAY BE HARMFUL IF SWALLOWED.

EMERGENCY OVERVIEW - CHRONIC HAZARD WARNING

THIS MATERIAL IS RELATIVELY NONHAZARDOUS IN ROUTINE INDUSTRIAL OR LABORATORY SETTINGS.

POTENTIAL HEALTH EFFECTS

INHALATION

No adverse health effects expected from inhalation. May cause a short period of rapid or difficult breathing.

INGESTION

A burning sensation of the mouth may be noted following ingestion. May cause nausea, vomiting, diarrhea, and gastritis.

SKIN

Not expected to be a health hazard from skin exposure. May color the skin a bluish color. May cause photosensitization.

EYES

No adverse effects expected.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

INHALATION

No adverse effects expected from inhalation.

INGESTION

Nausea, vomiting, diarrhea, and gastritis.

SKIN

Not expected to be a health hazard from skin exposure.

EYES

No adverse effects expected.

CARCINOGENICITY

Not listed as a known or possible carcinogen by NTP or IARC.

MUTAGENICITY

No information found.

REPRODUCTIVE TOXICITY

No information found.

TERATOGENIC EFFECTS

No information found.

ROUTES OF ENTRY

No information found.

TARGET ORGAN STATEMENT

No information found.

4. FIRST AID MEASURES

INHALATION:

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

INGESTION:

Induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person. Call a physician.

SKIN:

Immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.

EYES:

Immediately flush eyes with plenty of water for at least fifteen minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

5. FIRE FIGHTING MEASURES

FLASH POINT: N.A. FLAMMABLE LIMITS: N.A.

FLASH POINT METHOD: N.A. AUTOIGNITION TEMPERATURE: N.A.

EXTINGUISHING MEDIA

Use media appropriate to the primary cause of fire.

PROTECTIVE EQUIPMENT

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

HAZARDOUS COMBUSTION PRODUCTS:

May produce oxides of nitrogen, sulfur, and carbon when heated to decomposition.

UNUSUAL FIRE AND EXPLOSION HAZARDS

N.A.

NFPA CODES: Health: 2 Flammability: 0 Reactivity: 0

6. ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Floor may be slippery. Use care to avoid falling. Transfer spilled material to suitable container for recovery or disposal.

WASTE DISPOSAL METHOD

Disposal must be made in accordance with applicable federal, state, and local regulations.

PERSONAL PRECAUTIONS

Wear appropriate protective equipment as specified in section 8.

7. HANDLING AND STORAGE

HANDLING

Avoid contact. Do not get in eyes, on skin, on clothing. Wash thoroughly after handling.

STORAGE

Keep in a tightly closed container, stored in a cooled, dry, ventilated area.

STORAGE TEMPERATURE: Room Temperature

DISPOSAL

Observe all national, state, and local regulations regarding disposal.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

AIRBORNE EXPOSURE LIMITS:

Component: Proprietary Quinone-Imine Dye

ACGIH Threshold Limit Value (TLV): none established

OSHA Permissible Exposure Limit (PEL):

ENGINEERING CONTROLS

In general, dilution ventilation is a satisfactory health hazard control for this substance. However, if conditions of use create discomfort to the worker, a local exhaust system should be considered.

RESPIRATORY PROTECTION

Not expected to require personal respirator usage.

EYE PROTECTION

Safety glasses.

SKIN PROTECTION

Wear protective gloves and clean body covering clothing.

OTHER CONTROL MEASURES

N.A.

9. PHYSICAL PROPERTIES

| | | | |
|--------------------------|-------|--|----------------------------|
| Boiling Point | 100 C | Evaporation Rate | 1.0 (H ₂ O = 1) |
| Melting Point | N.A. | Solubility in Water | soluble |
| Vapor Pressure mm Hg | water | pH | 7.0 |
| Vapor Density Air = 1 | 0.5 | Specific Gravity (H ₂ O = 1) | 1.0 |
| % Volatile by Volume | 98 | | |

10. STABILITY AND REACTIVITY

STABILITY

Stable under ordinary conditions of use and storage.

CONDITIONS TO AVOID

Incompatibles.

HAZARDOUS DECOMPOSITION PRODUCTS

May produce oxides of nitrogen, sulfur, and carbon when heated to decomposition.

HAZARDOUS POLYMERIZATION

Will not occur

INCOMPATIBLES

Strong oxidizing agents, alkali, dichromates, alkali iodides, reducing agents.

11. TOXICOLOGICAL INFORMATION**PRODUCT LD50 VALUES**

| | | |
|------------|-----------------------------|----------|
| Nuclistain | Oral Rat LD50 (mg/kg): | > 5 g/kg |
| Nuclistain | Dermal Rabbit LD50 (mg/kg): | No Data |

COMPONENT CANCER LIST STATUS

| Component | NTP Carcinogen | | IARC Category |
|-------------------------------|----------------|-------------|---------------|
| | Known | Anticipated | |
| Proprietary Quinone-Imine Dye | No | No | None |

12. ECOLOGICAL INFORMATION

When released into the soil, this material is not expected to evaporate significantly. When released into the water, this material is not expected to evaporate significantly. This material has an estimated bioconcentration factor (BCF) of less than 100. This material is not expected to significantly bioaccumulate. When released into the air, this material is expected to be readily degraded by reaction with photochemically produced hydroxyl radicals. When released into the air, this material may be removed from the atmosphere to a moderate extent by wet deposition. When released into the air, this material may be removed from the atmosphere to a moderate extent by dry deposition.

13. DISPOSAL CONSIDERATIONS

Observe all national, state, and local regulations regarding disposal.

14. TRANSPORT INFORMATION**Domestic (D.O.T.)**

Proper Shipping Name: Not Regulated

Hazard Class: N.A.

UN Number: N.A.

Packing Group: N.A.

International (I.A.T.A. / I.M.O.)

Proper Shipping Name: Not Regulated.

Hazard Class: N.A.

UN Number: N.A.

Packing Group: N.A.

15. REGULATORY INFORMATION**UNITED STATES**

TSCA Regulatory:

All intentional ingredients are listed on the TSCA Inventory.

SARA 311/312 Hazard Categories

| Component | Fire | Pressure | Reactivity | Acute | Chronic |
|-------------------------------|------|----------|------------|-------|---------|
| Proprietary Quinone-Imine Dye | No | No | No | Yes | No |

EUROPE

EEC Regulatory:

All intentional ingredients are listed on the European EINECS Inventory.

16. OTHER INFORMATION

NFPA CODES: Health: 2 Flammability: 0 Reactivity: 0

MANUFACTURER DISCLAIMER: The information given herein is offered in good faith as accurate, but without guarantee. Conditions of use and suitability of the product for particular uses are beyond our control. All risks of use of the product are therefore assumed by the user. Nothing is intended as a recommendation for uses which infringe valid patents or as extending license under valid patents. Appropriate warnings and safe handling procedures should be provided to handlers and users.